

In the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

1. (Original) A fresh meat product, comprising:  
a meat obtained from a dark-cutting carcass having a grading pH; and,  
an amount of at least one pH-lowering agent sufficient to lower the grading pH of  
at least a portion of said meat.
2. (Currently amended) A meat product according to claim 1, wherein the dark-cutting carcass ~~[[is]]~~comprises a beef carcass.
3. (Original) A meat product according to claim 2, wherein the at least one pH-lowering agent includes at least one acidulant.
4. (Original) A meat product according to claim 3, wherein the at least one acidulant is present in an amount sufficient to lower the grading pH of at least a portion of said meat.
5. (Currently amended) A meat product according to claim 1, wherein the dark-cutting carcass ~~[[is]]~~comprises a beef carcass and the at least one pH-lowering agent ~~[[is]]~~comprises at least one acidulant.
6. (Currently amended) A meat product according to claim 5, wherein the at least one acidulant ~~is chosen from~~ comprises one or more of organic acids, neutral cyclic esters of gluconic acid, and sodium acid sulfate, and calcium sulfate.
7. (Currently amended) A meat product according to claim 6, wherein the neutral cyclic ester of gluconic acid ~~[[is]]~~comprises glucono-delta-lactone ("GDL").

8. (Currently amended) A meat product according to claim 7, wherein the acidulant ~~[[is]]~~comprises GDL.

9. (Currently amended) A meat product according to claim 6, wherein the organic acid ~~is chosen from~~ comprises one or more of acetic acid, citric acid, fumaric acid, gluconic acid, lactic acid, malic acid, phosphoric acid, succinic acid, and tartaric acid.

10. (Currently amended) A meat product according to claim 1, wherein the pH-lowering agent ~~is chosen from~~ comprises one or more of organic acids, GDL, and low pH phosphates.

11. (Original) A meat product according to claim 1, wherein the amount of pH-lowering agent is sufficient to lower the grading pH of substantially all the meat.

12. (Original) A meat product according to claim 1, wherein the amount of said at least one pH-lowering agent is sufficient to lower the grading pH at least about 0.2 pH units.

13. (Original) A meat product according to claim 11, wherein the amount of said at least one pH-lowering agent is sufficient to lower the grading pH at least about 0.2 pH units but no more than about 1.3 pH units.

14. (Original) A meat product according to claim 11, wherein the amount of said at least one pH-lowering agent is sufficient to lower pH from about pH 5.4 to about pH 6.

15. (Original) A meat product according to claim 13, wherein the amount of said at least one pH-lowering agent is sufficient to lower pH from about pH 5.4 to about pH 5.9.

16. (Original) A meat product according to claim 14, wherein the amount of said at least one pH-lowering agent is sufficient to lower pH from about pH 5.5 to about pH

5.8.

17. (Original) A meat product, comprising:  
a meat having a grading color; and,  
an amount of at least one pH-lowering agent sufficient to alter the grading color  
of at least a portion of said meat.

18. (Original) A meat product according to claim 17, wherein said meat is  
derived from a dark-cutting carcass.

19. (Currently amended) A meat product according to ~~claim 1~~, claim 18, wherein  
said meat is derived from a dark-cutting bovine carcass.

20. (Currently amended) A meat product according to claim 19, wherein said dark-  
cutting carcass ~~[[has]]~~comprises a dark burgundy/purple appearance and the amount of  
said at least one pH-lowering agent is sufficient to alter the grading color of at least a  
portion of said meat to a bright cherry red typically associated with meat having a pH of  
from about pH 5.4 to about pH 6.1.

21. (Currently amended) A meat product according to claim 19, wherein said at least  
one pH-lowering agent ~~is chosen from~~ comprises one or more of organic acids, GDL,  
sodium acid sulfate, calcium sulfate, and low pH phosphates.

22. (Currently amended) A meat product according to claim 21, wherein said at least  
one pH-lowering agent ~~[[is]]~~comprises at least one acidulant, and said at least one  
acidulant ~~is chosen from~~ comprises one or more of organic acids, GDL, sodium acid  
sulfate, and calcium sulfate.

23. (Original) A meat product according to claim 22, wherein said meat has a  
green weight, and the amount of said at least one acidulant ranges from greater than 0%  
of the green weight of said meat to about 10% of the green weight of said meat.

24. (Original) A meat product according to claim 23, wherein the amount of said at least one acidulant ranges from greater than about 0% of the green weight of said meat to about 2% of the green weight of said meat.

25. (Original) A meat product according to claim 24, wherein the amount of said at least one acidulant ranges from about 0.3% of the green weight of said meat to about 0.6% of the green weight of said meat.

26. (Currently amended) A meat product according to claim 25, wherein said at least one acidulant ~~[[is]]~~comprises GDL.

27. (Original) A meat product according to claim 24, wherein the amount of said at least one acidulant ranges from about 0.1% of the green weight of said meat to about 0.3% of the green weight of said meat.

28. (Currently amended) A meat product according to claim 26, wherein the at least one acidulant ~~[[is]]~~comprises sodium acid sulfate.

29. (Original) A meat product according to claim 19, further comprising a buffering agent.

30. (Currently amended) A meat product according to claim 29, wherein the buffering agent ~~[[is]]~~comprises a high pH phosphate.

31. (Original) A meat product according to claim 29, wherein the pH of the meat is between pH 5.5 and 5.9.

32. (Original) A meat product according to claim 30, wherein the pH of the meat is pH 5.7.

33. (Currently amended) A meat product according to claim 21, wherein the at least one acidulant ~~[[is]]~~comprises at least two acidulants, and the at least two acidulants are together present in an amount sufficient to alter the grading color of at least a portion of said meat.

34. (Original) A method of treating meat, comprising: identifying meat in a dark-cutting carcass and contacting said meat derived from said dark-cutting carcass with an amount of at least one pH-lowering agent, wherein the meat has a grading pH and grading color, and the amount of pH-lowering agent is sufficient to lower the grading pH, alter the grading color, or both of at least a portion of said meat.

35. (Currently amended) A method according to ~~claim 33~~, claim 34, wherein the at least one pH-lowering agent ~~[[is]]~~comprises at least one acidulant.

36. (Currently amended) A method according to ~~claim 34~~, claim 35, wherein the grading color ~~[[is]]~~comprises a dark burgundy/purple and the amount of the at least one acidulant is sufficient to redden at least a portion of said meat.

37. (Currently amended) A method according to ~~claim 34~~, claim 35, wherein the grading pH ranges from about 6.3 to about 6.7.

38. (Currently amended) A method according to ~~claim 36~~, claim 37, wherein the at least one acidulant ~~is chosen from~~ comprises one or more of organic acids, GDL, sodium acid sulfate, and calcium sulfate.

39. (Currently amended) A method according to ~~claim 37~~, claim 38, wherein the process further includes tumbling said meat.

40. (Currently amended) A method according to ~~claim 33~~, claim 34, wherein said contacting ~~is accomplished by~~ comprises injecting said meat with a brine solution comprising said at least one pH-lowering agent.

41. (Currently amended) A method according to ~~claim 33~~, claim 34, wherein said contacting is ~~accomplished by~~ comprises marinating said meat in a brine solution comprising said at least one pH-lowering agent.
42. (Currently amended) A method according to ~~claim 33~~, claim 34, further comprising a drip/rest period.
43. (Currently amended) A method according to ~~claim 33~~, claim 34, further comprising packaging said meat.
44. (Currently amended) A method according to ~~claim 33~~, claim 34, wherein said at least one pH-lowering agent is ~~provided in~~ comprises an encapsulated form.
45. (Currently amended) A method according to ~~claim 33~~, claim 34, further comprising contacting said muscle with a buffering agent.
46. (Currently amended) A method according to ~~claim 44~~, claim 45, wherein the amount of said buffering agent is sufficient to eliminate or reduce residual activity of at least one of said at least one pH-lowering agents in said meat.
47. (Currently amended) A method according to ~~claim 44~~, claim 45, wherein said buffering agent ~~[[is]]~~ comprises a phosphate solution.
48. (Currently amended) A method according to ~~claim 33~~, claim 34, further comprising contacting said muscle with one or more ingredients suitable for accelerating the action of at least one of said at least one pH-lowering agents.
49. (Currently amended) A method according to ~~claim 47~~, claim 48, wherein the one or more ingredients suitable for accelerating the action of at least one of said at least one pH-lowering agents is ~~chosen from~~ comprises one or more of erythorbate and ascorbic

acid

50. (Original) A method of treating meat, comprising: identifying a bovine carcass as a dark-cutting bovine carcass and contacting meat derived from said dark-cutting bovine carcass with an amount of at least one pH-lowering agent, wherein the meat has a grading pH and grading color, and the amount of pH-lowering agent is sufficient to lower the grading pH, alter the grading color, or both of at least a portion of said meat.

51. (Currently amended) A method according to claim 49, wherein the at least one pH-lowering agent ~~[[is]]~~comprises at least one acidulant.

52. (Currently amended) A method according to claim 50, wherein the grading color ~~[[is]]~~comprises a dark burgundy/purple and the amount of the at least one acidulant is sufficient to redden at least a portion of said meat.

53. (Original) A method according to claim 50, wherein the grading pH ranges from about 6.3 to about 6.7.

54. (Currently amended) A method according to claim 51, wherein the at least one acidulant ~~is chosen from~~ comprises one or more of organic acids, GDL, sodium acid sulfate, and calcium sulfate.

55. (Original) A method according to claim 53, wherein the process further includes tumbling said meat.

56. (Currently amended) A method according to claim 49, wherein said contacting is ~~accomplished by~~ comprises injecting said meat with a solution comprising said at least one pH-lowering agent.

57. (Currently amended) A method according to claim 49, wherein said contacting is

~~accomplished by~~ comprises marinating said meat in a solution comprising said at least one pH-lowering agent.

58. (Original) A method according to claim 49, further comprising a drip/rest period.

59. (Original) A method according to claim 49, further comprising packaging said meat prior to contacting said meat with said pH-lowering agent.

60. (Original) A method according to claim 49, further comprising packaging said meat after contacting said meat with said pH-lowering agent.

61. (Currently amended) A method according to claim 49, wherein said at least one pH-lowering agent ~~is provided in~~ comprises an encapsulated form.

62. (Original) A method according to claim 49, further comprising contacting said muscle with a buffering agent.

63. (Original) A method according to claim 61, wherein the amount of said buffering agent is sufficient to stabilize the pH in said meat at a pH below the grading pH.

64. (Currently amended) A method according to claim 61, wherein said buffering agent ~~[[is]]~~ comprises a phosphate solution.

65. (Original) A method according to claim 49, further comprising contacting said muscle with one or more ingredients suitable for accelerating the action of at least one of said at least one pH-lowering agents.

66. (Currently amended) A method according to claim 64, wherein the one or more ingredients suitable for accelerating the action of at least one of said at least one pH-



lowering agents ~~is chosen from~~ comprises one or more of erythorbate and ascorbic acid.